

CHAPTER V

CONCLUSION AND SUGGESTION

V.1 Conclusion

According to chapter IV section IV.1.3 and IV.4.1, there is a reduction in the plastic moment (M_p or M_r) because of the shear. The initial plastic moment was 557867722.78 N-mm and after the reduction it becomes 238833727.15 N-mm. By the reduction at the plastic moment, it affects the moment at the connection as well (M_f) so the design of the connection can be more efficient. The welded connection design without the influence of shear is 9 mm thickness of weld and with the influence of shear is 5 mm. Length of weld is 500 mm. In other word, the design can be prevented from overstrength.

V.2 Suggestion

In the short span and depth beam (small L/d ratios) the beam shear is high so there may cause over design for moment resistance. This may unsafe because the effect of high shear in short span beams. To make the design more efficient the interaction within shear and moment should be considered.

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